

Cook, who was attached to the Belgian Antarctic Expedition, discourses pleasantly on "The Possibilities of Reaching the Four Poles." In *Good Words* Mr. E. W. Maunder writes on "The Lords of Cold" (the title, it may be noted, is borrowed from a line in Plumptre's "Dante"), the article being a study in stellar perspective. In the same magazine is also to be found a contribution, by Mr. Aflalo, on "How Wild Creatures Feed." *Chambers's Journal* always contains at least one article of scientific interest; the present number has in it papers, entitled "Tropical Diseases and Cures" and "Alcohol from Paper and Sawdust."

THE additions to the Zoological Society's Gardens during the past week include a Bonnet Monkey (*Macacus sinicus*) from India, presented by Mr. G. A. S. Bell, R.N.; a Ring-tailed Lemur (*Lemur catta*) from Madagascar, presented by Miss M. C. Rawcliffe; a Common Duiker (*Cephalophus grimmi*, ♂) from South Africa, presented by Mr. J. E. Matcham; five Wild Cats (*Felis catus*) from Inverness-shire, presented by Mr. George J. Bailey; a Levaillant's Amazon (*Chrysolis levaillantii*) from Mexico, presented by Mr. J. Farmer Hall; a Royal Python (*Python regius*) from West Africa, presented by Mr. Benjamin Stewart; an Alpine Newt (*Molge alpestris*), nine Black Salamanders (*Salamandra atra*), two Slowworms (*Anguis fragilis*) from Switzerland, presented by the Rev. J. W. Horsley; a Common Viper (*Vipera berus*), British, presented by Mr. G. Alan Marriott; a Common Duiker (*Cephalophus grimmi*, ♀) from South Africa, a Syrian Bear (*Ursus syriacus*) from Western Asia, a Cheetah (*Cynoelurus jubatus*) from India, two Black-faced Kangaroos (*Macropus melanops*, ♂, ♀) from Tasmania, six Wrinkled Terrapins (*Chrysemys scripta rugosa*) from the West Indies, an Amboina Box Tortoise (*Cyclemmys amboinensis*) from the East Indies, five Mississippi Terrapins (*Malacoclemmys geographica*), a Prickly Trionyx (*Trionyx spinifer*) from North America, three Annulated Terrapins (*Nicoria annulata*) from Western South America, deposited; a Three-toed Sloth (*Bradypus tridactylus*) from British Guiana, purchased.

OUR ASTRONOMICAL COLUMN.

EPIHEMERIS FOR OBSERVATIONS OF EROS.—The following computed positions for July are from the ephemeris prepared by Herr F. Ristenpart (*Astronomische Nachrichten*, Bd. 152, No. 3643).

Ephemeris for 12h. Berlin Mean Time.

1900.	R.A.			Decl.
	h.	m.	s.	
July 5 ...	0	54	6.51	+14 13 22.3
7 ...	57	27.78	...	14 50 33.5
9 ...	I	0	48.24	15 27 55.3
11 ...	4	7.89	...	16 5 27.7
13 ...	7	26.71	...	16 43 10.8
15 ...	10	44.66	...	17 21 5.0
17 ...	14	1.68	...	17 59 10.8
19 ...	17	17.70	...	18 37 28.1
21 ...	20	32.62	...	19 15 57.1
23 ...	23	46.36	...	19 54 38.1
25 ...	26	58.84	...	20 33 31.3
27 ...	30	9.98	...	21 12 36.9
29 ...	33	19.70	...	21 51 55.1
31 ...	I	36 27.93	...	+22 31 26.5

MEASURES OF EROS.—*Harvard College Observatory Circular* (No. 51) contains the results of the measurements of photographs obtained during the years 1893, 1894 and 1896, giving the positions of the planet during those years. The complete discussion of the measures is being prepared for a volume of the *Observatory Annals*, but the numbers here published show that at the Harvard College Observatory there is the means of tracing the path of any object since 1890, during the times in which it was moderately bright, with nearly as great accuracy as if a

series of observations had been taken of it with a meridian circle.

TOTAL ECLIPSE OF THE SUN, MAY 28.—M. Deslandres communicates the report of his work in connection with the recent eclipse to the *Comptes rendus* (vol. cxxx. pp. 1691-1695). His programme comprised four classes of investigation:—(1) velocity of corona; (2) ultra-violet spectrum of corona and chromosphere; (3) infra-red spectrum of corona; (4) photography of corona.

Observing visually with a powerful grating spectroscope, he found by the inclination of the corona line that on the west side of the equator the corona appeared to have a more rapid speed of rotation than the disc. The photographic spectra taken for this purpose are too faint for measurement.

The ultra-violet spectra were obtained with spar quartz prismatic cameras, ten plates being obtained showing good images down to  $\lambda$  3000.

The investigation of the infra-red radiation from the corona was undertaken with a view of providing a possible means of observing the corona without an eclipse, and the results would indicate that the corona is specially rich in these calorific radiations. M. Deslandres states that at his station, Argamasilla, Spain, totality was five seconds shorter than the calculated time.

THE ROYAL OBSERVATORY, GREENWICH.

IT is customary for the Astronomer Royal to present his annual report to the Board of Visitors of the Royal Observatory on the first Saturday in June, but as it is easier to transfer such a function to another date than to change the time of a total eclipse of the sun, the usual day of meeting was adjourned until June 26 last. On this day, the weather, however, did not quite come up to summer standard; but fortunately the rain held off, and the afternoon proved sufficiently fine to allow the numerous visitors to inspect the buildings and instruments. As is customary, we give below a brief *résumé* of the report.

BUILDINGS.

The building of the new observatory so near to the boundary of the grounds has necessitated an alteration in the position of the old fence, to show the building off more effectively, so that provision has been made in the Navy estimates to put the fence further away, and the plans for this are now under consideration. This building also includes the new library rooms, and we learn that the removal of the books to their new position was completed in March last. The opportunity has also been utilised for their rearrangement and for the preparation of a new catalogue, both of which, we are told, were much needed. Not only is the rearrangement of the books practically complete, but good progress has also been made with the formation of the card catalogue, a system which is to be highly recommended.

TRANSIT CIRCLE.

The sun, moon, planets, and fundamental stars have been regularly observed on the meridian as in previous years. The number of observations made from 1899 May 11 to 1900 May 10, is as follows:—

Transits, the separate limbs being counted as one observation	...	...	...	10,712
Determinations of collimation error	...	...	...	297
Determinations of level error	...	...	...	684
Circle observations	...	...	...	10,001
Determinations of nadir point (included in the number of circle observations)	...	...	...	674
Reflexion observations of stars (similarly included)	...	...	...	637

The number of stars observed in 1899 is about 5000.

An unusually large number of observations was obtained in the three months, August-October, the average number of transits observed being more than 1300 each month. From November to the date of the report, in consequence of the cloudy weather, the average has been only half this number.

The apparent correction for discordance between the nadir observations and stars obtained by reflexion for 1899 was found to be slightly larger—namely,  $-0''.41$ —than that of last year, which was  $-0''.36$ .